

Husky

Managed Ethernet Series

HME-821 (8TX, 2 FX – MM) and HME-823 (8TX, 2 FX – SM)

Overview



The Husky managed Industrial Ethernet Switch is an extremely powerful and highly reliable fault-tolerant switch required in Industrial Ethernet applications. HME-821 and HME-823 series can be remotely configured by a Web browser, SNMP, Telnet, CLI using menu driven management.

The Husky managed switch supports the **X Ring** self-recovery mechanism which allows the switch to reconfigure and provide a redundant path in the network. In case any part of your network is disrupted or disconnected, the redundant feature allows a fault recovery time of less than 50ms to save your network from encountering an interruption or failure.

Advanced management features, include Dual Homing and Ring Coupling, IGMP snooping and VLANs. The switch provides a high level of immunity to electromagnetic interference and power supply surges typically found in industrial plant environments.

Key Features

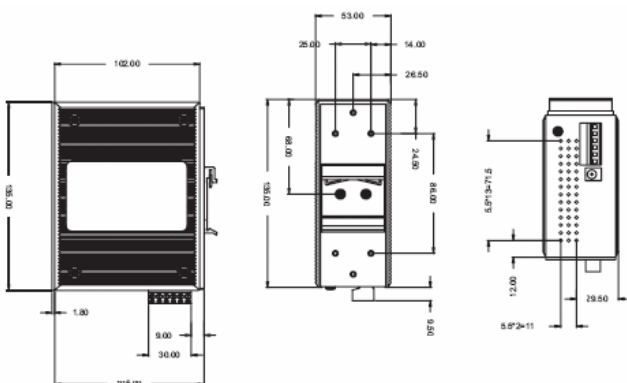
Hardware Feature

- Complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3X, IEEE 802.3ad, IEEE 802.1p, IEEE 802.1Q, IEEE 802.1D, IEEE 802.1W, IEEE 802.1x
- RJ-45 Port support auto MDI/MDI-X function
- Wide-range redundant power design
- Store and forward switch architecture
- DIN rail and 3-way wall mount design

Industrial Conformance

- 12 to 48V DC, redundant power with polarity reverse protection and terminal block for master and slave power
- 10 to 70 Degrees C operation temperature
- IP-30 standard Aluminum case
- EMI complies with FCC Class A, CE EN6100-4-2, CE EN6100-4-3, CE EN6100-4-4, CE EN6100-4-5 and CE EN6100-4-6, EN61000-4-8 and EN61000-4-11
- Stability testing with IEC60068-2-32(Free fall), IEC60068-2-27(Shock) and IEC60068-2-6(Vibration)

Mechanical Dimension (in mm)



Specifications

Technology

Standard	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX/100BASE-FX IEEE802.3x Flow Control and Back Pressure IEEE802.3ad Port trunk with LACP IEEE802.1d Spanning Tree Protocol IEEE802.1w Rapid Spanning tree IEEE802.1p Class of Service IEEE802.1Q VLAN Tagging IEEE 802.1x User Authentication (Radius)
RFC Standard	RFC2030 SNMP, RFC 2821 SMTP, RFC 1215 Trap, RFC2233 MIBII, RFC 1157 SNMP MIB, RFC 1493 Bridge MIB, RFC 2674 VLAN MIB, RFC 2665 Ethernet like MIB, RFC 2819 RMON MIB, Private MIB
Network Media	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm (100m) 100Base-TX: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm (100m)
Protocol Technology	CSMA/CD
Switching Architecture	Store and Forward
Packet Filter	Broadcast packet filtering -Number of MAC (50 Tables) -IP Address Security (10 Sections)

Performance

Network Data Transfer Rate	14,880 pps for Ethernet port and 148,800 pps for Fast Ethernet port
MAC Address	8K
Memory Buffer	1Mbytes
Back-plane	2.0 Gbps
System Log	1000 records
Back-plane	2.0 Gbps
Transfer packet size	3.87 Mpps at 64 bytes
Local configuration	RJ-45 for RS-232 series
Port Statistics	Supported
Flow Control	Full-duplex and Back Pressure for Half-duplex
Packet Filter	Broadcast/Multi-cast/Unknown Broadcast storm packet filter

Interface

Number of Ports	8 x 10/100Base-TX + 2 x 100Base FX (HME-821 multimode) (HME-823 singlemode)
System Interface	Port Enable/Disable, Auto-Negotiation and Force speed, Full-duplex or Half-duplex mode
Diagnostic LED	Per unit: Power (Green), Power 1 (Green), Power 2 (Green), Fault (Yellow), Master (Green) 8 port 10/100: Link/Activity (Green), Full duplex/Collision (Yellow) Fiber: Link/Activity (Green)
Optical cable	SC (Multi Mode) : 50/125um to 62.5/125um SC (Single Mode) : 9/125um to 10/125um
Distance & wavelength	Multi Mode : Distance 2 km, Wavelength 1310nm Single Mode : Distance 30 km, Wavelength 1310nm
Alarm	Relay output for port break and power failure Current carry ability (1A at DC24V)

Power

Power Supply	12 ~48 VDC, Redundant power with polarity reverse protect function and connective removable terminal block for master and slave power
Reverse Polarity Protection	Present
Power Consumption	3.5 Watts

Mechanical

Case Dimensions (WxHxD)	IP 31 standard, 72(W) x 152(H) x 105(D) in mm
Mounting	DIN Rail and wall mount
Installation	Provide DIN rail kit and wall mount plate for 3-way installation

Environmental

Operating Temperature	-10 deg C to 70 deg C
Storage Temperature	-40 deg C to 85 deg C (-40 deg F to 185 deg F)
Operating Humidity	5%~90%RH (Non-condensing)

Regulatory Approvals	
Emission	FCC Class A, CE EN6100-4-2, CE EN6100-4-3, CE EN-6100-4-4, CE EN6100-4-5, CE EN6100-4-6, EN61000-4-8, EN61000-4-11
Safety	UL, cUL, CE/EN60950 Class 1 Div. 2 pending
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Free Fall	IEC60068-2-32
Management Features	
Ring Redundancy X Ring	Provide Ring Redundancy, Dual Homing, and Ring Coupling. Provides redundant backup feature and the recovery time below 50 ms
Management	Web/SNMP/Telnet/CLI/Menu Driven management
Management Protocols	SNMP V1/V2c, RMON 1 (Statistics, History, Alarm, Events) SMTP, SNMP, IGMP V1 & Query mode, DHCP/Client, DHCP Server, TFTP
MIB	MIB-II, Bridge MIB, Ethernet like MIB, VLAN MIB, Private MIB
Configuration	Web interface management Reset button is available to restore default settings
VLAN	Supports Port based VLAN/Tag VLAN(256 entries) VLAN ID(Up to 4K) GVRP(256 Groups) Static VLAN groups up to 256, the VLAN ID can be assigned from 1 to 4094.
Quality of Service	Hardware supports 4 queues per port
Port Mirroring	Online traffic monitoring on selected ports
MAC IP Security	- Supports ingress and egress MAC address filter and static source MAC address lock, Dumping MAC address Table - Ingress/Egress MAC address security, per port support learning of 50 MAC addresses
IP Security	Supports 10 IP address accounts for system management security for Web, SNMP and Telnet management security to prevent intruder.
Firmware update	By TFTP
IGMP Snooping	v1 and v2, query mode, multicast group with 256 entries
LACP Port Trunk	3 Trunk groups/Maximum 4 trunk members
Port Mirror	Global system supports 3 mirroring types: "RX, TX and Both packet". Maximum of 8 entries
Port Trunk	802.3ad with LACP function. Up to 3 trunk groups and maximum group member up to 4 ports
Class of Service (CoS)	4 queues per port
Quality of Service (QoS)	Port based/Tag based, IPv4 ToS, IPv6 Different Service
E-mail warning	Pre-defined events
SNMP Trap	Cold start, link down, link up, authorization fail, Ring Redundancy topology Change, Power alarm trap, Trap station up to 3
SMTP	Supports up to 6 e-mail accounts

Ordering Information

- HME-821 : Husky Industrial SNMP managed 8-port Ethernet Switch + 2-port 100Base-FX Multi mode
(-10 to 70 deg C operating temperature)
- HME-823 : Husky Industrial SNMP managed 8-port Ethernet Switch + 2-port 100Base-FX Single mode
(-10 to 70 deg C operating temperature)